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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/014,192	11/13/2001	Srinivas Gutta	US 010569	3013

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
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EXAMINER

USTARIS, JOSEPH G

ART UNIT PAPER NUMBER

2623

DATE MAILED: 09/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/014,192

Applicant(s)

GUTTA ET AL.

Examiner

Joseph G. Ustaris

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☒ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/13/2001, 08/29/2003</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statements (IDS) submitted were on 11/13/2001 and 08/29/2003. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Specification***

2. The abstract of the disclosure is objected to because it exceeds the 150 word max length. Correction is required. See MPEP § 608.01(b).

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Section IV.C, reads as follows:

While abstract ideas, natural phenomena, and laws of nature are not eligible for patenting, methods and products employing abstract ideas, natural phenomena, and laws of nature to perform a real-world function may well be. In evaluating whether a claim meets the requirements of section 101, the claim must be considered as a whole to determine whether it is for a particular application of an abstract idea, natural phenomenon, or law of nature, rather than for the abstract idea, natural phenomenon, or law of nature itself.

"... claims directed to nothing more than abstract ideas (such as mathematical algorithms), natural phenomena, and laws of nature are not eligible for and therefore excluded from patent protection ..."

"while a scientific truth, or mathematical expression of it, is not a patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be"

"One may not patent a process that comprises every 'substantial practical application' of an abstract idea, because such a patent 'in practical effect would be a patent on the [abstract idea] itself ..."

Claim(s) 1-20 is/are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 1, 9, 14, 19, and 20 define nothing more than mathematical algorithm that, by itself, is a Judicial Exception (i.e., non-statutory). Judicial Exceptions may be statutory if they recite a practical application, or they are part of an otherwise statutory claim, **and** if the claimed practical application does not “preempt” the Judicial Exception. While 1, 9, 14, 19, and 20 appears to broadly recite a practical application of the mathematical algorithm, such a broad application preempts the mathematical algorithm because in effect, it recites every “substantial practical application” thereof. Therefore, 1-20 are rejected as being non-statutory.

The examiner suggests clarifying the claimed practical application so as to exclude recitation of every “substantial practical application” of the claimed law of nature. Any amendment to the claim should be commensurate with its corresponding disclosure.

Furthermore, claim 19 is rejected under 35 U.S.C. 101 because the claimed invention is directed to a disembodied computer program, which falls under non-statutory subject matter.

#### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7, 9-12, 14-17, 19 and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Chislenko et al. (US006041311A).

Regarding claim 1, Chislenko et al. (Chislenko) discloses a method for identifying one or more mean items (e.g. the rated items, which their ratings are averaged) for a plurality of items (e.g. the group), J, each of said items having at least one symbolic attribute (e.g. the rating of the item), each of said symbolic attributes having at least one possible value (e.g. the value of the rating), said method comprising the steps of (See col. 10 lines 32-64):

computing a variance for each of said items (e.g. how much of a difference/variance is the item rating from the group centroid) (See col. 10 lines 58-64);  
and

selecting at least one item that minimizes said variance (e.g. the item rating matches the group centroid when there is minimum difference/variance from the group centroid) as the mean symbolic value (e.g. the item best represents the groups average rating, for example "POP" music rating) (See col. 10 lines 32-64).

Regarding claim 2, the symbolic values for said at least one selected item comprise said mean of said plurality of items (e.g. each item represents the groups average rating, for example "POP" music rating) (See col. 10 lines 32-64).

Regarding claim 3, the system assigns a label to said plurality of items using at least one symbolic value from said selected item (See col. 10 lines 21-26 and 32-42).

Regarding claim 4, the plurality of items are a cluster including similar items (e.g. each group includes similar music content/genre) (See col. 10 lines 32-64).

Regarding claim 5, the items are programs (e.g. music programs and movies) (See col. 3 lines 6-14).

Regarding claim 6, the items are content (e.g. music recordings and movies) (See col. 3 lines 6-14).

Regarding claim 7, the items are products (e.g. novels and restaurants) (See col. 3 lines 6-14).

Claim 9 contains the limitations of claim 1 (wherein the method describes the qualities of the plurality of items by placing each item into groups) and is analyzed as previously discussed with respect to that claim.

Claim 10 contains the limitations of claims 2 and 9 and is analyzed as previously discussed with respect to those claims.

Claim 11 contains the limitations of claims 3 and 9 and is analyzed as previously discussed with respect to those claims.

Claim 12 contains the limitations of claims 4 and 9 and is analyzed as previously discussed with respect to those claims.

Claim 14 contains the limitations of claim 1 (wherein the system has a memory for storing computer readable code and a processor operatively coupled to the memory (See Fig. 3, col. 2 lines 40-55 and col. 19 lines 41-51)) and is analyzed as previously discussed with respect to that claim.

Claim 15 contains the limitations of claims 2 and 14 and is analyzed as previously discussed with respect to those claims.

Claim 16 contains the limitations of claims 3 and 14 and is analyzed as previously discussed with respect to those claims.

Claim 17 contains the limitations of claims 4 and 14 and is analyzed as previously discussed with respect to those claims.

Claim 19 contains the limitations of claim 1 (wherein the process is stored on an article of manufacture (See Fig. 3, col. 2 lines 40-55 and col. 19 lines 41-51)) and is analyzed as previously discussed with respect to that claim.

Claim 20 contains the limitations of claims 1 and 14 (wherein the system has the means to computing and selecting as discussed in the claims above) and is analyzed as previously discussed with respect to those claims.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8, 13, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chislenko et al. (US006041311A) in view of Keyes et al. (US007003484B2).

Claim 8 contains the limitations of claim 1 and is analyzed as previously discussed with respect to that claim. However, Chislenko does not disclose using " $\text{Var}(J) = \sum_{i \in J} (X_i - X_\mu)^2$ " to compute the variance.

It is noted that " $\text{Var}(J) = \sum_{i \in J} (X_i - X_\mu)^2$ " is one of many common and well known equations used to compute the variance (e.g. population/sample variance).

Keyes et al. (Keyes) discloses a minimization function used to assign each data point to a cluster that it belongs to. Keyes discloses a function identical to " $\text{Var}(J) = \sum_{i \in J} (X_i - X_\mu)^2$ ", where if  $\mu_{ik}$  is equal to one then J or "c" is a cluster of items from the same class,  $X_i$  or " $X_k$ " is an item, i or "k", and  $X_\mu$  or " $V_i$ " is the item(s) in the plurality of items, J, such that it minimizes the Var (J) or "J" (See col. 22 lines 15-37). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the method disclosed by Chislenko to use the equation form " $\text{Var}(J) = \sum_{i \in J} (X_i - X_\mu)^2$ " to compute the variance such that it minimizes Var (J), as taught by Keyes, in order to provide a more accurate means of grouping items together.

Claim 13 contains the limitations of claims 8 and 9 and is analyzed as previously discussed with respect to those claims.

Claim 18 contains the limitations of claims 8 and 14 and is analyzed as previously discussed with respect to those claims.



***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please take note of Robinson (US005884282A) for the similar system of recommending items.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph G. Ustaris whose telephone number is 571-272-7383. The examiner can normally be reached on M-F 7:30-5PM; Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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A handwritten signature in black ink, appearing to be 'JGU'.

JGU

September 5, 2006

A handwritten signature in black ink, appearing to be 'Chris Kelley'.

CHRIS KELLEY

SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600